

11. A 360-degree rotary position sensor system, comprising in combination:

(a) a semiconductor substrate having:

(1) an angular sensor operable to generate an output representative of an angular position of a magnetic field with an angle range of 180-degrees;

5 (2) an linear sensor operable to generate output representative of a sense of the magnetic field;

wherein (i) the linear sensor is coaxially located with respect to the angular sensor; and (ii) the semiconductor substrate is located substantially parallel to a magnet mounted on a rotating shaft, wherein a gap is located
10 substantially between the semiconductor substrate and the magnet; and

(b) logic that functions to determine, based on the output representative of the angular position and the output representative of the sense, an output representative of an angular position of the magnetic field with an angle range of 360-degrees.

12. A method of making a 360-degree rotary position sensor, comprising in combination:

forming on a common semiconductor substrate, an angular sensor and a linear sensor, wherein the angular sensor is operable to generate an output representative of an
5 angular position of a magnetic field with an angle range of 180-degrees; and wherein the linear sensor is operable to generate an output representative of a sense of the magnetic

201 595
12-15
cga 5/24/05